

EXHIBIT 5

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551-FDS

PLAINTIFF’S SECOND SET OF REQUESTS FOR PRODUCTION

Under Rules 26 and 34 of the Federal Rules of Civil Procedure, Plaintiff, Singular Computing LLC, requests that Defendant, Google LLC, produce the Documents designated below within thirty days of service of these requests.

DEFINITIONS

Notwithstanding any definition below, each word, term, or phrase used in these Requests is intended to have the broadest meaning permitted under the Federal Rules of Civil Procedure. As used in these Requests, the below terms shall have the following meanings:

1. All Definitions and rules of construction incorporate the obligations set forth in L.R. 26.
2. “Accused Products” means all accused products, computer systems, devices, and other hardware or software identified in Plaintiff’s Amended Complaint (Dkt. No. 37) and in Plaintiff’s Infringement Contentions, including without limitation at least:
 - a. Google Cloud Tensor Processing Unit Version 2 (“TPU v2”), including software that runs workloads on TPU v2, including TensorFlow;
 - b. Google Cloud Tensor Processing Unit Version 3 (“TPU v3”), including software that runs workloads on TPU v3, including TensorFlow;

c. Larger compute systems that incorporate (a) or (b), such as TPU Pods.

3. “Accused Services” means all Google services delivered in whole or in part by use of any Accused Product, including Translate, Photos, Search, Assistant, Gmail and Cloud (including Cloud AI and Cloud TPU).

4. “Asserted Patents” or “Patents-in-Suit” refers collectively to US Patent Nos. 8,407,273 (“’273 Patent”); 9,218,156 (“’156 Patent”); and 10,416,961 (“’961 Patent”), as well as any other patent(s) that Plaintiff asserts in this action.

5. “Communication” means the transmittal or receipt of information (in the form of facts, ideas, inquiries, or otherwise) regardless of the medium used to transmit or receive the information.

6. “Document” is synonymous in meaning and equal in scope to the usage of this term in Fed. R. Civ. P. 34(a) and encompasses all documents, whether printed, recorded, microfilmed, stored electronically or optically, reproduced by any process, written or produced by hand, or recorded in any other way. Documents include—but are not limited to—communications, intranet and internet system data, data compilations, spreadsheets, word processing files, images, databases, digital photocopier, memory, and any other information stored in memory storage devices. Any draft or non-identical copy is a separate document within the meaning of this term.

7. “Plaintiff” or “Singular” means Singular Computing LLC, its employees, agents, attorneys, representatives, or any other persons who have acted or purported to act for their behalf.

8. “Google,” “you” “Defendant” or “your” means Google, LLC, its employees, agents, attorneys, representatives, or any other persons who have acted or purported to act for its behalf. This includes Google LLC, its parents, subsidiaries, divisions, branches, predecessors, or successors-in-interest, and its agents, employees, officers, directors, and attorneys.

9. “Person” means any natural person or any business, legal, or governmental entity or association.

10. Any reference to a corporation, partnership, or other business entity herein, includes its divisions, offices, departments, and other corporate subdivisions, its domestic and foreign subsidiaries and affiliates, its predecessors in interest, its present or former officials, executives, officers, partners, directors, employees, agents, and all other persons acting or purporting to act on behalf of the entity, its subsidiaries, officers or predecessors, including all past or present employees exercising discretion, making policy, and making decisions or participating in any of the foregoing functions.

INSTRUCTIONS

1. For each request, you shall produce all documents in your possession, custody or control that are responsive to the request.¹

2. You shall state any objection to any request in writing and produce all documents requested that are not subject to that objection.

3. These requests are continuing in nature. If you obtain any additional documents responsive to these document requests, you shall timely produce such documents to Plaintiff, as required by Fed. R. Civ. P. 26(e).

4. When a document contains both privileged and non-privileged material, you shall produce all non-privileged material to the fullest extent possible without disclosing the privileged material. If you assert any privilege or other protection for material contained in a document, you shall clearly indicate the allegedly privileged portion(s).

¹ “Possession” includes actual possession by you, actual possession by you with another, or constructive possession by you in that you are legally entitled or otherwise able to obtain actual possession from another person.

5. You shall identify as to each document the reason for the redaction or alteration. Any redaction must be clearly visible on the redacted document.

6. If you believe that any request calls for the disclosure of privileged information, You must comply with the requirements of Federal Rule of Civil Procedure 26(b)(5) as to each document for which a claim of privilege is made.

7. All documents produced in response these request should be true and accurate copies of the documents as they would appear to a Google employee reading the document in the ordinary course of business. For example, if a document contains figures, those figures must be included in the produced version of that document, undistorted and in full resolution. Futher, if a document is originally in color, then the produced version of that document should also be in color.

REQUESTS

- 1) The final versions of the VPU micro-architecture specification for TPU v2 and TPU v3.
- 2) The final versions of the MXU micro-architecture specification for TPU v2 and TPU v3.
- 3) The final versions of the TensorCore chip architecture specification for TPU v2 and TPU v3.
- 4) The current versions of the VPU micro-architecture specification, the MXU micro-architecture specification, and the TensorCore chip architecture specification for any future TPU products currently in development (including the products known as “Pufferfish” and “Puffylite”).
- 5) All documents available at go/datacenter-ml-metrics.
- 6) All documents available at go/perf-metric-tpus.
- 7) All documents available at go/perf-tco:nn-accelerators.
- 8) All documents available at go/pfc-mxu-spec.
- 9) All documents available at go/pfc-vpu-spec.
- 10) All documents available at go/pfc-tcs-spec.
- 11) Any figure or diagram that is referenced or mentioned by citation, hyperlink, or otherwise in any of the documents produced responsive to Requests Nos. 1-10.

- 12) All micrographs in Google's possession showing a TensorCore or a portion of a TensorCore at a resolution of 2 μm (2000 nm) or less, including both optical and electron micrographs.
- 13) All documents referenced or mentioned by citation, hyperlink, or otherwise in any of the following documents:
 - a) GOOG-SING-00002124
 - b) GOOG-SING-00070606
 - c) GOOG-SING-00026944
 - d) GOOG-SING-00000221
 - e) GOOG-SING-00004490
 - f) GOOG-SING-00047550
 - g) GOOG-SING-00027474
 - h) GOOG-SING-00000387
 - i) GOOG-SING-00027477
 - j) GOOG-SING-00030789
 - k) GOOG-SING-00041189

Dated: April 27, 2021

Respectfully submitted,

/s/ Paul J. Hayes

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ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF SERVICE

I certify that on April 27, 2021, I served this document on Defendant by causing a copy to be sent via electronic mail to its counsel of record.

/s/ Daniel McGonagle